UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,931	03/12/2001	Inge Liden	Q63553	7226

7590 05/04/2005

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, DC 20037-3213

EXAMINER	
TRUONG, THANHNGA B	

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/802,931	LIDEN ET AL.	
	Examiner	Art Unit	
	Thanhnga B. Truong	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/27/2004 (Amendment)*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/27/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment filed on December 27, 2004 has been entered. Claims 1-12 are pending. Claims 1-3, 6-7, 9, and 12 are amended.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Uemura et al (US 4,912,310 B1).

a. *Referring to claim 1:*

i. Uemura teaches:

(1) creating a first user device having an electronic circuitry, creating a first system device having an electronic circuitry and being used in a first level of a lock system, storing a first encryption key in said first user device and said first system device, carrying out an authentication process between said first user device and said first system device using said first encryption key **[i.e. Uemura's invention provides a method of issuing cards by using a card issuing machine including a memory having stored therein an initial secret code, a card reader and a keyboard, the method being characterized by checking whether a secret code keyed in matches the initial secret code stored in the memory; storing in a memory a code keyed in for associating a first card with the card issuing machine and recording the associating keyed-in code in the first card by the card reader to issue the first card when the two secret codes are found to match; issuing a new card upon confirming a keyed-in first secret code of the first card; and issuing another new card upon confirming a secret code of the new card issued (column 2, lines 55-68)]**, and

(2) in case said authentication process was successful, carrying out a software operation by said first system device, by which software operation said first encryption key stored in said first user device is replaced' by a second encryption key **[i.e., the first card is issued by the card issuing machine on condition that the secret code keyed-in matches the initial secret code stored in the memory of the machine. At this time, a code for associating the first card with the card issuing machine is keyed in and stored in the first card and in the machine. With the issue of the first card, the first card is closely associated with the issuing machine. The first card is of the highest level and serves as a key for issuing another card of lower level (column 3, lines 10-18)]**,

(3) wherein said second encryption key is stored in second system devices and user devices used in a second level of said lock System, thereby making said first user device operable with said second system and user devices **[i.e., a second secret code as to the second card is similarly stored in the card or in the card issuing machine (column 3, lines 31-32)]**.

b. *Referring to claim 2:*

i. Uemura further teaches:

(1) wherein during the step of replacing said first encryption key stored in said first user device, said second encryption key is supplied by said first system device **[i.e., the second card can be issued on condition that a secret code keyed in matches the first secret code stored in the card issuing machine. Accordingly, the second card can not be issued by those other than the registerer of the first secret code (column 3, lines 26-31). Uemura's invention further provides a card issuing system which is characterized in that the system comprises a card reader for reading card data from a first card, a keyboard for entering a secret code of the first card and data needed for issuing a second card, means for checking a secret code keyed in with the secret code in the card data read from the first card by the card reader or with a secret code accessible by the card data in the first card, a card writer for issuing the second card, and means for controlling the card writer so that when the two secret codes are found**

to match, specified card data including the keyed-in data is written in the second card by the card writer (column 3, lines 49-61)].

c. *Referring to claim 3:*

i. This claim has limitations that is similar to those of claim 2, thus it is rejected with the same rationale applied against claim 2 above.

d. *Referring to claim 4:*

i. Uemura further teaches:

(1) comprising the additional step of supplying said second encryption key to said computer through a network including local networks and public telephone networks **[i.e., card issuing consoles include a parent machine 10 and one or a plurality of satellite machines 11 connected thereto by transmission cables (column 5, lines 40-42)].**

e. *Referring to claim 5:*

i. Uemura further teaches:

(1) wherein said first system device is a system key of a master key system **[i.e., Figure 2 shows the kinds of cards to be used for the hotel card lock system and the security levels thereof. A grand authorization card (hereinafter abbreviated as a "GR card", that is "system key") is the highest in security level (grand level). This card is to serve as a "key" for the overall system. The cards of the second highest level (authorization level) are a master authorization card, sub-master authorization card and guest authorization card (hereinafter referred to briefly as "MA card," "SMA card" and "GA card," respectively). These three kinds of cards, that is "system key", at the authorization level correspond to the authorization cards AC shown in Figure 1. (column 6, lines 2-14)].**

f. *Referring to claim 6:*

i. Uemura further teaches:

(1) wherein said first user device is a user key of a master key system **[i.e., the level for unlocking the hotel room (unlocking level) is divided into management level, guest level and maintenance level. Available at**

the management level are an emergency card, master card and maid card. The cards at the guest level are a standby card, guest card A and guest card B. The cards at the maintenance level are a maintenance card, lockout card and cancelling card. These nine kinds of cards at the unlocking level correspond to the key cards KC, that is "user key", shown in Figure 1 (column 6, lines 15-23)].

g. *Referring to claim 7:*

i. Uemura further teaches:

(1) wherein said first user device is a lock of a master key system **[i.e., a card lock unit 70 includes a card reader for reading data from the key card KC. The card data is checked before unlocking (column 5, lines 53-55)].**

h. *Referring to claim 7:*

i. Uemura further teaches:

(1) wherein said electronic encryption keys are unreadable from outside said electronic circuitry **[i.e., this check is specific to the guest cards A and B. The guest card data includes date of issue of the card (check-in date) and check-out time. When the present time minus the allowable check-out overtime is between the day of check-in and the check-out day, time, the card is acceptable. Otherwise, the card is judged as being invalid, that is "unreadable" (column 29, lines 40-47)].**

i. *Referring to claim 9:*

i. This claim has limitations that is similar to those of claim 1, thus it is rejected with the same rationale applied against claim 1 above.

ii. Uemura further teaches:

(1) an electronic circuitry having an electronic memory adapted for storing an electronic code, said electronic code uniquely identifying the device and comprising a first electronic encryption key **[i.e., Figure 6 schematically shows the electrical construction of the card issuing console (parent machine) 10. The console 10 includes a control unit 20 comprising a central processing unit (CPU), a ROM having stored therein the program to be executed by the CPU and other fixed data, and a RAM for storing variable data. Connected to the**

control unit 20 through a suitable interface are the foregoing ten-key arrangement 16, function switches 15, display 12, totalling printer 11, satellite connector 23 and data input unit connector 24, and further a card reader 21 and a card reader 22 with a printer (column 9, line 64 through column 10, line 8)].

j. *Referring to claim 10:*

i. This claim has limitations that is similar to those of claim 9, thus it is rejected with the same rationale applied against claim 9 above.

k. *Referring to claim 11:*

i. This claim has limitations that is similar to those of claim 7, thus it is rejected with the same rationale applied against claim 7 above.

l. *Referring to claim 12:*

i. This claim has limitations that is similar to those of claims 1-7 and 9, thus it is rejected with the same rationale applied against claims 1-7 and 9 above.

Response to Arguments

4. Applicant's arguments with respect to claims 1-12 have been fully considered but they are persuasive.

Applicant argues that:

"Uemura fails to teach or suggest replacing the encryption key such that once the change in the encryption key has taken place, the user device is no longer associated with the first system devices."

Examiner totally disagrees with applicant's remarks and strongly maintains that:

Uemura teaches the claimed subject matter. In addition, Uemura discloses issuing a new card upon confirming a keyed-in first secret code of the first card; and issuing another new card (or the newly replacement card) upon confirming a secret code of the new card issued (column 2, lines 65-68). Furthermore, the sequence number on the current key card thereafter matches the sequence number stored in the memory until another new key card (or a newly replacement key card) is issued (emphasis added) (column 9, lines 1-3). Uemura further teaches, for the reissue of

card, the room number and the number of cards to be issued are keyed in (step 215), and a new guest card is issued for the room number concerned with reference to the data, such as check-out time, stored in the location of the RAM room data area for the room number (step 216) (column 19, lines 22-27 and column 35, lines 65-67 through column 36, lines 1-16).

Applicant further argues that:

"Uemura fails to teach or suggest the encryption keys being used for further communication between different devices."

Again, Examiner disagrees and still maintains that:

Referring to Figure 1, those which can be executed by the satellite console 11 are the guest card issuing process, room cancelling process and card data monitoring process only. The satellite machine 11 may have access to the room data area in the RAM of the parent machine 10 through communication with the machine 10, or the satellite machine 11 itself may be adapted to have a data area storing the same data as the room data area of the parent machine 10 (column 17, lines 16-25).

Applicant further argues that:

"Uemura fails to teach or suggest distributing the cards between different hierarchical levels."

Again, Examiner totally disagrees with applicant's remarks and strongly maintains that:

Uemura teaches the claimed subject matter. In addition, Uemura discloses only with use of a card of high level, a card of lower level can be issued. This provides a hierarchical card system. Because a card of low level can be issued only by using a card of higher level, high security can be maintained (column 3, lines 40-44).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

a. Roe (US 4, 736, 419) discloses an electronic lock system having a data encryption key physically and electronically protected from identification for protecting electronic equipment from use by unauthorized personnel (see abstract).

b. Trent (US 5,541,581) discloses an electronic security system includes an electronic lock mechanism and an electronic key, each of which is provided with a microprocessor controller and a memory storing data including an ID code and encryption key codes (see abstract).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 571-272-3858.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

TBT
April 21, 2005

KIM VU
SUPERVISORY PATENT EXAMIN
TECHNOLOGY CENTER 2100